

ARTICLE APPEARED  
ON PAGE A-1

WASHINGTON POST  
18 February 1985

# U.S. Plans New Satellites

## *Craft Would Be Able to Evade Attack*

By Walter Pincus  
Washington Post Staff Writer

The Pentagon is developing a new generation of deep-space navigation, communications and spy satellites capable of evading Soviet attack, aided by a nearly completed network of ground stations that will keep constant surveillance on all objects in deep space, according to sources inside and outside the Reagan administration.

Studies are under way to see if the new satellites also can be armed to defend themselves.

The new satellites, which would hover 22,000 miles in space, are being hardened against radiation and laser attacks, and some are being given tiny jet engines so they

can be maneuvered away from attack.

At the same time, Spacetrack, a little-publicized worldwide U.S. network of five space-watching facilities, is nearing completion. When operational in 1988, it will provide 24-hour-a-day, global coverage of all satellites in deep space.

"We are looking at the ultimate video game," one nongovernment source said last week. "With telescopes and video displays, the United States will be able to watch any attacker approach its satellites and, by sending off signals, have that satellite maneuver away."

Eventually, he added, "there may be a capability to attack the attackers." The United States and the Soviet Union have two types of military satellites: those that circle the Earth in low orbits near the Earth's atmosphere and those that are sent much farther out into deep-space "geosynchronous" orbits, where they travel at the same speed as the Earth's rotation and appear suspended above the same spot on Earth.

The Soviets for 10 years have had a rudimentary weapon that is

designed to knock down the low-level U.S. satellites. Currently, the Pentagon is beginning tests on its own antisatellite weapon, which would be able to knock out low-level Soviet satellites as they pass over the United States.

Two overseas radars, one at Kwajalein in the Pacific and the other in the Philippines—not part of the Spacetrack system—would provide early warning and targeting of Soviet satellites for the planned U.S. low-level antisatellite weapon.

Neither country has developed a weapon that could attack satellites about 22,000 miles from Earth in what is called "deep space." Nonetheless, the Pentagon has been at work for more than four years putting together its Spacetrack surveillance system.

If a future Soviet weapon were launched at the U.S. deep-space satellites, the Spacetrack system would give U.S. units "adequate time," one official said, to take defensive actions before the Soviet weapon neared its target.

Next year's defense budget reportedly contains \$20 million to complete the final parts of the Spacetrack sensor system.

Three of the high-powered electronic telescope and television-camera units already are in operation in New Mexico, Hawaii and Korea. The fourth unit is being built on the British-owned island of Diego Garcia in the Indian Ocean. Construction of the final one in Portugal is scheduled to begin within 18 months.

The ground-based network is scheduled to be fully operational in 1988.

By the time the deep-space defense system is in place, the United States is expected to have its new deep-space satellites deployed. These will include updated versions of today's intelligence and early-

warning satellites and also the Navstar and Milstar systems, which are to provide navigation, targeting, attack assessment and battle communications for all military services.

The Navstar global positioning system will be "the first direct ap-

plication of space for our fighting forces," according to a report sent to Congress two years ago. It will consist of 18 satellites permanently fixed in deep space around the globe. By providing all-weather navigation, time and even speed information over radio channels that the Soviets will not be able to jam, the system will be able to give instant targeting information to weapons as they travel through the atmosphere.

The Navstar satellites will also carry a sensor that will be able to monitor and report on nuclear detonations, giving exact locations. Such a capability would be useful in peacetime for nuclear arms control compliance and in wartime would provide damage assessment.

The Navstar satellites have been hardened against nuclear radiation effects and ground-based high energy lasers, according to testimony given Congress the past two years.

Milstar will be a multisatellite system that is to provide, by the 1990s, world-wide, two-way voice and data transmissions that will "ensure that the minimal essential communications required for war are available," according to an Air Force report to Congress last year.

Its satellites, too, will be laser- and nuclear-hardened and also have jets to enable them to maneuver.